Amendments to the Claims:

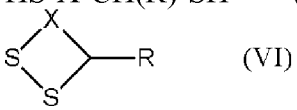
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for performing mass spectrometry of sulfur atom-containing derivatives of an organic residue, characterized in that the method comprises ionizing a metal-organic residue complex into the derivatives, wherein the complex has the organic residue bound through a sulfur atom to the metal.

2. (Original) A method for performing mass spectrometry of a compound or salt thereof, characterized in that the method comprises ionizing a metal-organic residue complex into sulfur atom-containing derivatives,
wherein the metal-organic residue complex is represented by the general formula (I)
$(R\text{-}S)_n\text{-}M^1$ (I),
wherein R is an organic residue, S is a sulfur atom and n indicates a stoichiometric ratio of (R-S) group with respect to M^1 and is an integer equal to or greater than 1; and
wherein the compound is represented by the general formulae (II) and/or (III):
R-SH (II) and/or
R-S-S-R (III),
wherein R and S are the same as defined above.

3. (Original) A method for performing mass spectrometry of a compound or salt thereof, characterized in that the method comprises ionizing a metal-organic residue complex into sulfur atom-containing derivatives,
wherein the metal-organic residue complex is represented by the general formula (IV):
$M^1\text{-}S\text{-}X\text{-}CH(R)\text{-}S\text{-}M^1$ (IV),
wherein R is an organic residue, S is a sulfur atom, M^1 at both ends are same metal entities, X is a lower alkylene or a lower alkenylene;
wherein the compound is represented by the general formulae (V) and/or (VI):
HS-X-CH(R)-SH (V) and/or



(VI)

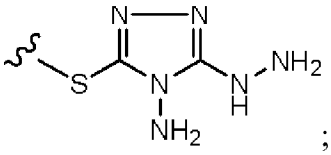
wherein R, S and X are the same as defined above.

4. (Original) A method for performing mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising the following steps of:

1) contacting a metal-organic residue complex with a sugar chain or a sugar chain-containing substance under the conditions where the metal-organic residue complex and the sugar chain or sugar chain-containing substance may react with each other, wherein the metal-organic residue complex contains a metal bound to a group represented by the following formula:

-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-NH_2,
-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-NH(CH_3),
-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-$CH(NH_2)$-W^4-SH,
-S-Y-$(OCH_2CH_2)_n$-NH-C(=S)-$CH(NH_2)$-W^4-SH,
-S-W^1-O-NH_2,
-S-W^1-O-NH(CH_3),
-S-W^1-O-W^2-O-NH_2,
-S-W^1-O-W^2-O-NH(CH_3),
-S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-NH_2,
-S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-NH(CH_3),
-S-W^1-C(=O)-NH-NH_2,
-S-W^1-C(=S)-NH-NH_2,
-S-W^1-NH-C(=O)-$CH(NH_2)$-W^4-SH,
-S-W^1-NH-C(=S)-$CH(NH_2)$-W^4-SH
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH,
-S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-Z^6-SH,
-S-Z^1-O-Z^3-$CH(NH_2)$-Z^6-SH,
-S-Z^1-O-Z^3-O-NH_2,
-S-Z^1-O-Z^3-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH
-S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-Z^6-SH
-S-Z^1-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH,
-S-Z^1-Z^3-Z^4-$CH(NH_2)$-Z^6-SH,

or



;

2) obtaining the metal-organic residue complex bound to the sugar chain or the sugar chain-containing substance; and

3) ionizing the metal-organic residue complex bound to the sugar chain or the sugar chain-containing substance into sulfur atom-containing derivatives of the organic residue.

5. (Original) A method according to any one of claims 1 to 4, wherein the metal has a surface enough to cause a diffuse reflection of a laser beam.

6. (Original) A method according to claim 5, wherein the metal is a fine metal particle.

7. (Currently Amended) A method according to any one of claims 1 to 4 and 6, wherein the metal is gold, silver, cadmium or selenium.

8. (Currently Amended) A method according to any one of claims 1 to 4 and 6, wherein the mass spectrometry is carried out by MALDI-TOF MS method.

9. (Original) A method according to any one of claims 1 to 3, wherein the organic residue is a group comprising a sugar chain or a sugar chain-containing substance.

10. (Original) A method for performing mass spectrometry of a sulfur atom-containing analyte comprising the steps of:

1) reacting tetrachloroauric acid with a sulfur atom-containing analyte in the presence of a reducing agent;

2) obtaining a gold-analyte complex particle which has the analyte bound through the sulfur atom to the gold; and

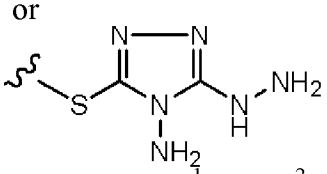
3) ionizing the obtained gold-analyte complex particles into a sulfur atom-containing analyte derivative.

11. (Original) A metal-organic residue complex containing a metal bound to a group represented by the following formula:

$-S-Y-(OCH_2CH_2)_n-NH-C(=O)-CH_2-O-NH_2$,
$-S-Y-(OCH_2CH_2)_n-NH-C(=O)-CH_2-O-NH(CH_3)$,
$-S-Y-(OCH_2CH_2)_n-NH-C(=O)-CH(NH_2)-W^4-SH$,
$-S-Y-(OCH_2CH_2)_n-NH-C(=S)-CH(NH_2)-W^4-SH$,
$-S-W^1-O-NH_2$,
$-S-W^1-O-NH(CH_3)$,
$-S-W^1-O-W^2-O-NH_2$,
$-S-W^1-O-W^2-O-NH(CH_3)$,
$-S-(CH_2CH_2O)_n-W^1-O-W^2-O-NH_2$,
$-S-(CH_2CH_2O)_n-W^1-O-W^2-O-NH(CH_3)$,
$-S-W^1-C(=O)-NH-NH_2$,
$-S-W^1-C(=S)-NH-NH_2$,
$-S-W^1-NH-C(=O)-CH(NH_2)-W^4-SH$,

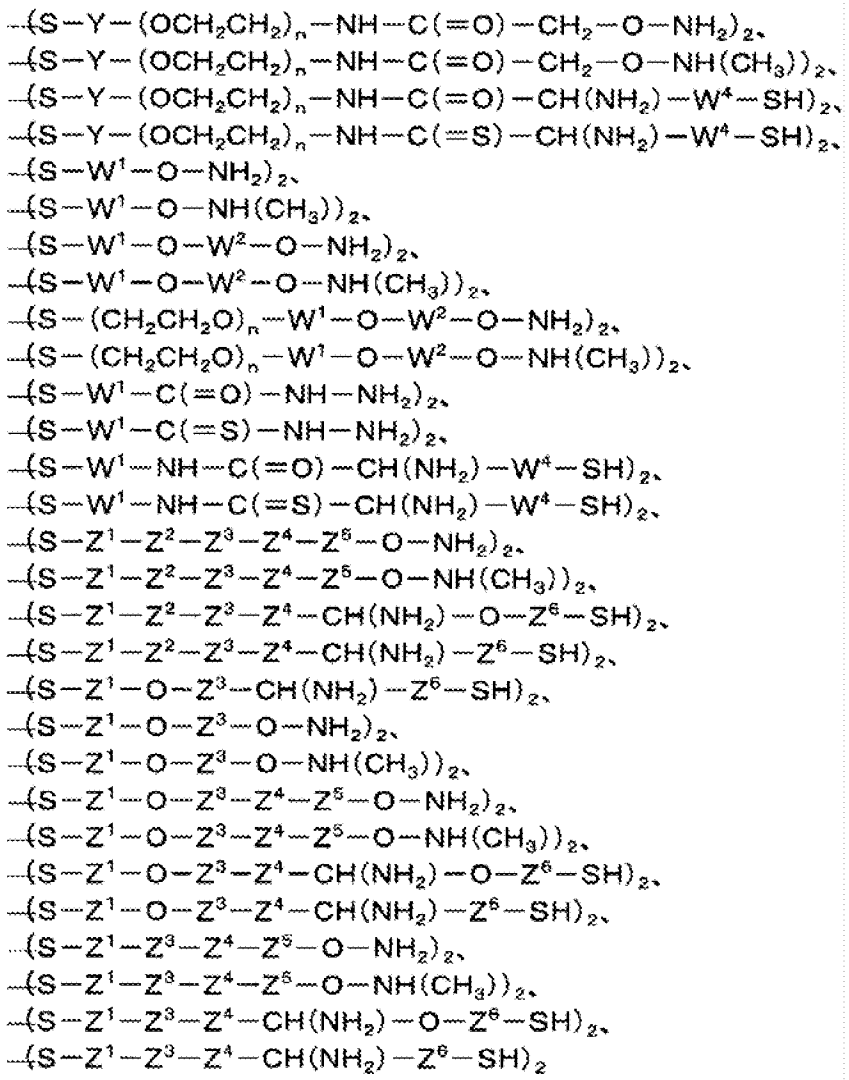
-S-W^1-NH-C(=S)-CH(NH_2)-W^4-SH,
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^2-Z^3-Z^4-CH(NH_2)-O-Z^6-SH,
-S-Z^1-Z^2-Z^3-Z^4-CH(NH_2)-Z^6-SH,
-S-Z^1-O-Z^3-CH(NH_2)-Z^6-SH,
-S-Z^1-O-Z^3-O-NH_2,
-S-Z^1-O-Z^3-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-CH(NH_2)-O-Z^6-SH
-S-Z^1-O-Z^3-Z^4-CH(NH_2)-Z^6-SH
-S-Z^1-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^3-Z^4-CH(NH_2)-O-Z^6-SH,
-S-Z^1-Z^3-Z^4-CH(NH_2)-Z^6-SH,

or

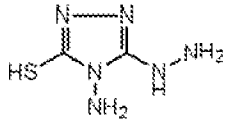


wherein, Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;
W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive.

12. (Original) A method for producing metal-organic residue complex particles, wherein the method comprises reacting tetrachloroauric acid with a compound represented by the following formula:



or

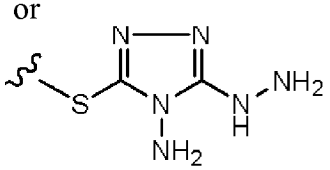


,or a salt thereof, in the presence of a reducing agent,
wherein, Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;
W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive.

13. (Original) A method for trapping a sugar chain or a sugar chain-containing substance, characterized in that the method comprises contacting a metal-organic residue complex with a sugar chain or a sugar chain-containing substance, under conditions where the metal-organic residue complex and the sugar chain or the sugar chain-containing substance may react with each other,
the metal-organic residue complex has a metal bound to a group represented by the following formula:

-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-NH_2,
-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-NH(CH_3),
-S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-$CH(NH_2)$-W^4-SH,
-S-Y-$(OCH_2CH_2)_n$-NH-C(=S)-$CH(NH_2)$-W^4-SH,
-S-W^1-O-NH_2,
-S-W^1-O-NH(CH_3),
-S-W^1-O-W^2-O-NH_2,
-S-W^1-O-W^2-O-NH(CH_3),
-S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-NH_2,
-S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-NH(CH_3),
-S-W^1-C(=O)-NH-NH_2,
-S-W^1-C(=S)-NH-NH_2,
-S-W^1-NH-C(=O)-$CH(NH_2)$-W^4-SH,
-S-W^1-NH-C(=S)-$CH(NH_2)$-W^4-SH,
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^2-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH,
-S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-Z^6-SH,
-S-Z^1-O-Z^3-$CH(NH_2)$-Z^6-SH,
-S-Z^1-O-Z^3-O-NH_2,
-S-Z^1-O-Z^3-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-O-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH
-S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-Z^6-SH
-S-Z^1-Z^3-Z^4-Z^5-O-NH_2,
-S-Z^1-Z^3-Z^4-Z^5-O-NH(CH_3),
-S-Z^1-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH,
-S-Z^1-Z^3-Z^4-$CH(NH_2)$-Z^6-SH,

or



wherein, Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;
W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive.

14. (Original) A method for measuring the molecular weight of a substance which may interact with an organic residue of a metal-organic residue complex, comprising the steps of:

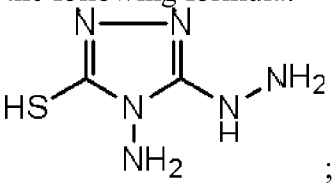
1) contacting the metal-organic residue complex with a substance which may interact with the organic residue, wherein the metal is bound through a sulfur atom to organic residue;

2) obtaining the metal-organic residue complex bound to the substance which may interact; and

3) ionizing the obtained metal-organic residue complex into derivatives of the organic residue, wherein the organic residue contains a sulfur atom.

15. (Original) A method for performing mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising the steps of:

1) contacting a compound with a metal, wherein the compound is represented by the following formula:



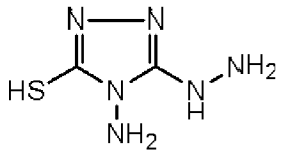
;

2) contacting the metal-organic residue complex obtained in 1) with a sugar chain or a sugar chain-containing substance under conditions where the metal-organic residue complex and the sugar chain or the sugar chain-containing substance may react with each other; and

3) ionizing the metal-organic residue complex obtained in 2) into derivatives of the organic residue, wherein the organic residue contains a sulfur atom.

16. (Original) A method for performing mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising the steps of:

1) contacting a compound represented by the following formula:



with a sugar chain or a sugar chain-containing substance under conditions where the compound and the sugar chain or the sugar chain-containing substance may react with each other;

2) contacting the compound obtained in 1) with a metal; and

3) ionizing the metal-organic residue complex obtained in 2) into derivatives of the organic residue, wherein the organic residue contains a sulfur atom.

17. (Original) A composition for trapping a sugar chain, comprising :

a compound represented by the general formula (II):

R-SH (II) or a salt thereof, wherein R is an organic residue; and S is a sulfur atom;

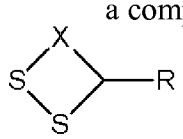
a compound represented by the general formula (III):

R-S-S-R (III) or a salt thereof, wherein, R and S are the same as defined above;

a compound represented by the general formula (V):

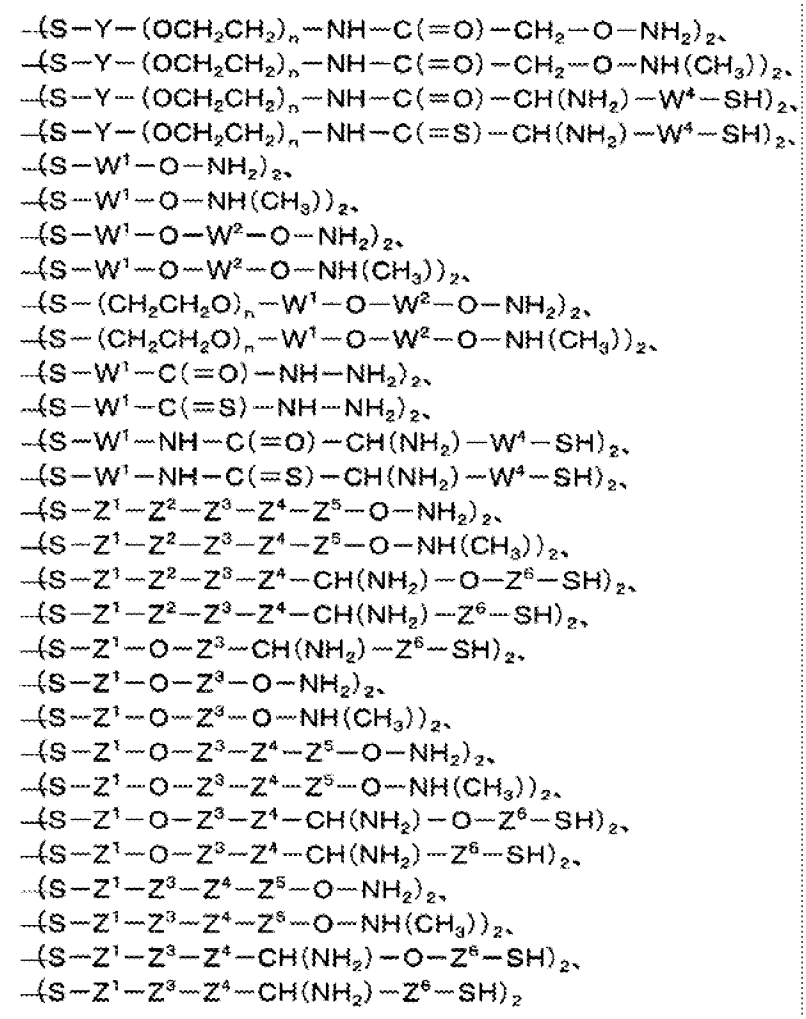
HS-X-CH(R)-SH (V) or a salt thereof, wherein R and S are the same as defined above; and X is lower alkylene or lower alkenylene; or

a compound represented by the general formula (VI):

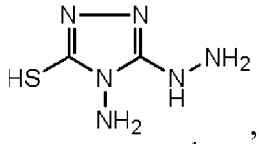
 (VI)

or a salt thereof, wherein, R, S and X are the same as defined above; or a mixture thereof.

18. (Currently Amended) ~~A~~ The composition of claim 17~~for trapping a sugar chain, comprising a~~ wherein the compound is represented by the following formula:



or



,

wherein Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;

W^4 is C1-C2 alkylene;

Z^1 is substituted or unsubstituted arylen or heteroarylen;

Z^2 is a nitrogen-containing heterocycle;

Z^3 and Z^5 are independently C1-C12 alkylene;

Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;

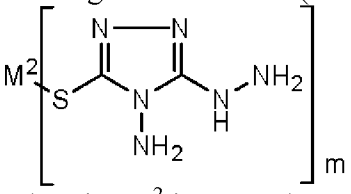
Z^6 is C1-C2 alkylene; and

n is an integer between 1 and 10, inclusive.

19. (Original) A metal-organic residue complex represented by the following formula:

M^2-(S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-$NH_2)_m$,
M^2-(S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-CH_2-O-$NH(CH_3))_m$,
M^2-(S-Y-$(OCH_2CH_2)_n$-NH-C(=O)-$CH(NH_2)$-W^4-$SH)_m$,
M^2-(S-Y-$(OCH_2CH_2)_n$-NH-C(=S)-$CH(NH_2)$-W^4-$SH)_m$,
M^2-(S-W^1-O-$NH_2)_m$,
M^2-(S-W^1-O-$NH(CH_3))_m$,
M^2-(S-W^1-O-W^2-O-$NH_2)_m$,
M^2-(S-W^1-O-W^2-O-$NH(CH_3))_m$,
M^2-(S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-$NH_2)_m$,
M^2-(S-$(CH_2CH_2O)_n$-W^1-O-W^2-O-$NH(CH_3))_m$,
M^2-(S-W^1-C(=O)-NH-$NH_2)_m$,
M^2-(S-W^1-C(=S)-NH-$NH_2)_m$,
M^2-(S-W^1-NH-C(=O)-$CH(NH_2)$-W^4-$SH)_m$,
M^2-(S-W^1-NH-C(=S)-$CH(NH_2)$-W^4-$SH)_m$,
M^2-(S-Z^1-Z^2-Z^3-Z^4-Z^5-O-$NH_2)_m$,
M^2-(S-Z^1-Z^2-Z^3-Z^4-Z^5-O-$NH(CH_3))_m$,
M^2-(S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-O-Z^6-$SH)_m$,
M^2-(S-Z^1-Z^2-Z^3-Z^4-$CH(NH_2)$-Z^6-$SH)_m$,
M^2-(S-Z^1-O-Z^3-$CH(NH_2)$-Z^6-$SH)_m$,
M^2-(S-Z^1-O-Z^3-O-$NH_2)_m$,
M^2-(S-Z^1-O-Z^3-O-$NH(CH_3))_m$,
M^2-(S-Z^1-O-Z^3-Z^4-Z^5-O-$NH_2)_m$,
M^2-(S-Z^1-O-Z^3-Z^4-Z^5-O-$NH(CH_3))_m$,
M^2-(S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-O-Z^6-$SH)_m$,
M^2-(S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-Z^6-$SH)_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-$NH_2)_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-$NH(CH_3))_m$,
M^2-(S-Z^1-Z^3-Z^4-$CH(NH_2)$-O-Z^6-$SH)_m$,
M^2-(S-Z^1-Z^3-Z^4-$CH(NH_2)$-Z^6-$SH)_m$,

or the general formula (VII):



(VII)

wherein, M^2 is a metal;
m indicates a stoichiometric ratio of an organic residue with respect to M^2 and is an integer equal to or greater than 1, wherein the organic residue contains a sulfur atom;
Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;
W^4 is C1-C2 alkylene;

Z^1 is substituted or unsubstituted arylen or heteroarylen ;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive.

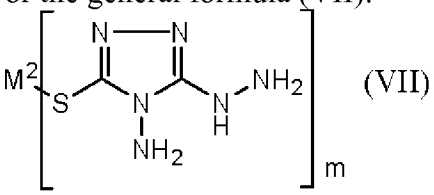
20. (Original) A composition for trapping a sugar chain, comprising: a metal-organic residue complex represented by the general formula (I):
$(R\text{-}S)_n\text{-}M^1$ (I),
wherein R is an organic residue; S is a sulfur atom; M^1 is a metal; and n indicates a stoichiometric ratio of (R-S) group with respect to M^1 and is an integer equal to or greater than 1; or

a metal-organic residue complex represented by the general formula (IV):
$M^1\text{-}S\text{-}X\text{-}CH(R)\text{-}S\text{-}M^1$(IV),

wherein R and S are the same as defined above, M^1 at both ends are a metal of the same substance and X is lower alkylene or lower alkenylene.

21. (Currently Amended) ~~A~~ The composition of claim 20~~for trapping a sugar chain, comprising a~~ wherein the metal-organic residue complex~~,~~ is represented by the following formula:
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH_2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH_2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=S)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}(CH_2CH_2O)_n\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}(CH_2CH_2O)_n\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}W^1\text{-}C(=O)\text{-}NH\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}C(=S)\text{-}NH\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}NH\text{-}C(=O)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}NH\text{-}C(=S)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}Z^5\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}Z^5\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}CH(NH_2)\text{-}O\text{-}Z^6\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}CH(NH_2)\text{-}Z^6\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}O\text{-}Z^3\text{-}CH(NH_2)\text{-}Z^6\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}O\text{-}Z^3\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}O\text{-}Z^3\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}O\text{-}Z^3\text{-}Z^4\text{-}Z^5\text{-}O\text{-}NH_2)_m$,

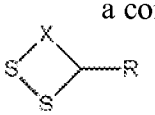
M^2-(S-Z^1-O-Z^3-Z^4-Z^5-O-$NH(CH_3)$)$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH)$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-$CH(NH_2)$-Z^6-SH)$_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-NH_2)$_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-$NH(CH_3)$)$_m$,
M^2-(S-Z^1-Z^3-Z^4-$CH(NH_2)$-O-Z^6-SH)$_m$,
M^2-(S-Z^1-Z^3-Z^4-$CH(NH_2)$-Z^6-SH)$_m$,
or the general formula (VII):



(VII)

wherein,
M^2 is a metal;
m indicates a stoichiometric ratio of an organic residue with respect to M^2 and is an integer equal to or greater than 1, wherein the organic residue comprises a sulfur atom;
Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;
W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene and
n is an integer between 1 and 10, inclusive.

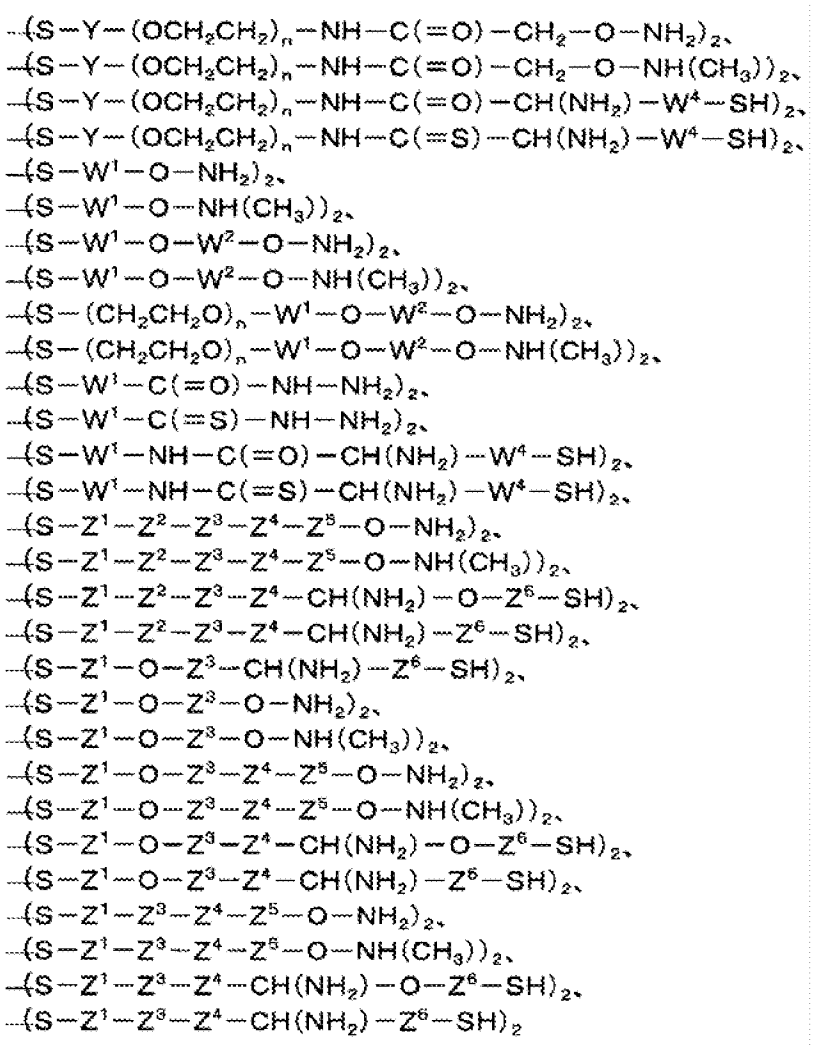
22. (Original) A kit for mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising:
A) a compound represented by the general formula (II):
R-SH (II)
or a salt thereof, wherein R is an organic residue; and S is a sulfur atom;
a compound represented by the general formula (III) R-S-S-R (III)
or a salt thereof, wherein R and S are the same as defined above;
a compound represented by the general formula (V):
HS-X-CH(R)-SH (V)
or a salt thereof, wherein R and S are the same as defined above; and X is lower alkylene or lower alkenylene; or
a compound represented by the general formula (VI):



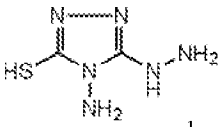
(VI)

or a salt thereof, wherein R, S and X are the same as defined above; or a mixture thereof; and
B) a metal.

23. (Original) A kit for mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising:
A) a sulfur atom containing derivatives of an organic residue, represented by the following formula:



or



wherein Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene;

W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle;
Z^3 and Z^5 are independently C1-C12 alkylene;
Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-;
Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive; and
B) a metal.

24. (Original) A kit for mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising:

a metal-organic residue complex represented by the general formula (I):

$(R\text{-}S)_n\text{-}M^1$ (I)

wherein, R is an organic residue, S is a sulfur atom, M^1 is a metal and n indicates a stoichiometric ratio of (R-S) group with respect to M^1 and is an integer equal to or greater than 1; or

a metal-organic residue complex represented by the general formula (IV):

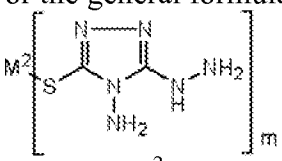
$M^1\text{-}S\text{-}X\text{-}CH(R)\text{-}S\text{-}M^1$ (IV)

wherein R and S are the same as defined above, M^1 at both ends are same metal entities and X is lower alkylene or lower alkenylene.

25. (Currently Amended) ~~A~~ The kit of claim 24~~for mass spectrometry of a sugar chain or a sugar chain-containing substance, comprising a~~ wherein the metal-organic residue complex~~,~~ is represented by the following formula:

$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH_2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH_2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=O)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Y\text{-}(OCH_2CH_2)_n\text{-}NH\text{-}C(=S)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}(CH_2CH_2O)_n\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}(CH_2CH_2O)_n\text{-}W^1\text{-}O\text{-}W^2\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}W^1\text{-}C(=O)\text{-}NH\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}C(=S)\text{-}NH\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}NH\text{-}C(=O)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}W^1\text{-}NH\text{-}C(=S)\text{-}CH(NH_2)\text{-}W^4\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}Z^5\text{-}O\text{-}NH_2)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}Z^5\text{-}O\text{-}NH(CH_3))_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}CH(NH_2)\text{-}O\text{-}Z^6\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}Z^2\text{-}Z^3\text{-}Z^4\text{-}CH(NH_2)\text{-}Z^6\text{-}SH)_m$,
$M^2\text{-}(S\text{-}Z^1\text{-}O\text{-}Z^3\text{-}CH(NH_2)\text{-}Z^6\text{-}SH)_m$,

M^2-(S-Z^1-O-Z^3-O-NH_2)$_m$,
M^2-(S-Z^1-O-Z^3-O-NH(CH_3))$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-Z^5-O-NH_2)$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-Z^5-O-NH(CH_3))$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-CH(NH_2)-O-Z^6-SH)$_m$,
M^2-(S-Z^1-O-Z^3-Z^4-CH(NH_2)-Z^6-SH)$_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-NH_2)$_m$,
M^2-(S-Z^1-Z^3-Z^4-Z^5-O-NH(CH_3))$_m$,
M^2-(S-Z^1-Z^3-Z^4-CH(NH_2)-O-Z^6-SH)$_m$,
M^2-(S-Z^1-Z^3-Z^4-CH(NH_2)-Z^6-SH)$_m$,
or the general formula (VII):



(VII)

wherein, M^2 is a metal, m indicates a stoichiometric ratio of an organic residue with respect to M^2 and is an integer equal to or greater than one, the organic residue comprises a sulfur atom, Y, W^1 and W^2 are independently C1-C12 alkylene, C2-C12 alkenylene or C2-C12 alkynylene, W^4 is C1-C2 alkylene;
Z^1 is substituted or unsubstituted arylen or heteroarylen;
Z^2 is a nitrogen-containing heterocycle, Z^3 and Z^5 are independently C1-C12 alkylene, Z^4 is -O-C(=O), -O-C(=S), -NH-C(=O), -NH-C(=S), -O- or -S-, Z^6 is C1-C2 alkylene; and
n is an integer between 1 and 10, inclusive.

26. (Currently Amended) A method according to any one of claims 1 to 4 and 6, wherein the mass spectrometry is carried out by LDI-TOF MS method.

27. (Original) A method according to claim 10, wherein the mass spectrometry is carried out by LDI-TOF MS method.

28. (New) A method according to claim 5, wherein the metal is gold, silver, cadmium or selenium.

29. (New) A method according to claim 5, wherein the mass spectrometry is carried out by MALDI-TOF MS method.

30. (New) A method according to claim 5, wherein the mass spectrometry is carried out by LDI-TOF MS method.